



Serial No. 10/687,613

Claim 1. Amended

Claim 2. Deleted

Claim 3. Original



Serial No. 10/687,613

Claim 1. Amended

1. A combination of an aircraft and high pressure spraying apparatus for spraying suspensions/solutions of insecticides having predetermined characteristics independent of the speed of the aircraft carrying out the spraying, said apparatus comprising:

a mounting frame being attached to the underside of said aircraft, said frame having a plurality of bearing braces, said bearing braces being reinforced with a plurality of brackets affixed downwardly from said frame,

a propeller shaft mounted through said bearing braces, said propeller shaft having a forward end and an aft end,

a full feathering propeller being mounted on said forward end of said propeller shaft, said propeller having a control cable attached thereto, said cable extending to the cockpit of said aircraft and being controlled by an operator in said aircraft,

a rotary piston [type] high pressure pump being mounted on said aft end of said propeller shaft, the input side of said pump being connected to a tank mounted in the interior of said aircraft,

a spray boom having a forward end and an aft end, said spray boom having a forward end [being] attached to said mounting frame, below the tail end of said aircraft, and being connected to the output side of said rotary piston [type] pump, and

a plurality of spray nozzles being attached to said aft end of said spray boom said spray boom having a plurality of nozzles, said nozzles having impingement elements for creating insecticide droplets by force of high pressure insecticide hitting pointed, impingement surfaces,

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2. A combination of an aircraft and spraying apparatus according to claim 1 wherein said spray nozzles consist of high pressure impingement nozzles.

Original

3. A combination of an aircraft and spraying apparatus according to claim 1 wherein said spray nozzles consist of BETE PJ-12 impingement nozzles.

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Claim 1. Amended

1. A combination of an aircraft and high pressure spraying apparatus for spraying suspensions/solutions of insecticides having predetermined characteristics independent of the speed of the aircraft carrying out the spraying, said apparatus comprising:

a mounting frame being attached to the underside of said aircraft, said frame having a plurality of bearing braces, said bearing braces being reinforced with a plurality of brackets affixed downwardly from said frame,

a propeller shaft mounted through said bearing braces, said propeller shaft having a forward end and an aft end,

a full feathering propeller being mounted on said forward end of said propeller shaft, said propeller having a control cable attached thereto, said cable extending to the cockpit of said aircraft and being controlled by an operator in said aircraft,

a rotary piston high pressure pump being mounted on said aft end of said propeller shaft, the input side of said pump being connected to a tank mounted in the interior of said aircraft,

a spray boom having a forward end and an aft end, said spray boom having a forward end attached to said mounting frame, below the tail end of said aircraft, and being connected to the output side of said rotary piston pump, and

a plurality of spray nozzles being attached to said aft end of said spray boom said spray boom having a plurality of nozzles, said nozzles having impingement elements for creating insecticide droplets by force of high pressure insecticide hitting pointed, impingement surfaces,

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2. A combination of an aircraft and spraying apparatus according to claim 1 wherein said spray nozzles consist of high pressure impingement nozzles.

Original

3. A combination of an aircraft and spraying apparatus according to claim 1 wherein said spray nozzles consist of BETE PJ-12 impingement nozzles.